REMARKS

Status of the Claims

In the Office Action mailed September 2, 2009, claims 55-101 were pending in the application. Claims 55-66, 69, 72-76, 78-81, 84, 86-88, and 90-94 are amended. Claims 77, 89, and 101 have been cancelled. No new claims have been added. Therefore, claims 55-76, 78-88, and 89-100 are present for examination. No new matter has been added by these amendments. Claims 55, 78, and 90 are independent claims. Applicants respectfully request reconsideration of this application as amended.

Objections Under 37 CFR 1.75(c)

Claims 58, 69, 81 and 93 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. The claims in question have been amended. These objections are now moot.

Rejections Under 35 U.S.C. §112

Claims 55-101 were rejected under 35 U.S.C. §112, first paragraph as failing to comply with the written description requirement. The claims rejected in items 15-17 and 20-22 of the Office Action, dated September 2, 2009, have been amended. These rejections are now moot.

The claims rejected in items 18 and 19 of the Office Action, dated September 2, 2009, are believed allowable. The Examiner rejects the claim as not being clear because there is a comparison step between either two bids or between a bid and a maximum acceptable bid. The Examiner appears to state that these elements are not necessary because bid 1 is selected. However, the reason bid 1 is selected is due to these comparisons. It is determined that bid 1 is more favorable and is thus selected. As such, these elements are not in contradiction but are reliant upon each other. This rejection should be rescinded

Rejections Under 35 U.S.C. §101

Claims 78-89 were rejected under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter. The claims in question have been amended. These rejections are now moot.

Rejections Under 35 U.S.C. §103

Claims 55-64, 67, 71, 74-76, 78-80, 86, 90-91 and 98 were rejected under 35 U.S.C. §103(a) as being unpatentable over British Telecommunications (EP Patent No. 1 246 097 A1) ("BT") in view of Philonenko (U.S. Publication No. 2002/0131399) further in view of Official

Notice. To establish a *prima facie* case of obviousness, all claim limitations must first be taught or suggested by the prior art. *See, e.g., DyStar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick Co.*, 464 F.3d 1356, 1360 (Fed. Cir. 2006); 80 U.S.P.Q.2d 1641, 1645 (2006). "All words in a claim must be considered in judging the patentability of that claim against the prior art." MPEP § 2143.03 (*citing In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970)). The Examiner must then provide an explicit analysis of the motivation for combining the references. *See KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007); 82 U.S.P.Q.2d 1385, 1396 (2007) ("a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art . . . ."). While the Examiner can choose one of several exemplary rationales from the MPEP to support an obviousness rejection, all the rationales in the MPEP still require the Examiner to demonstrate that all the claim elements are shown in the prior art. *See* MPEP § 2143, Original Eighth Edition, August 2001, Latest Revision July 2008. The art cited does not describe all elements of the claims.

Claim 55:

Missing Limitation: "the processor monitoring the first queue for a plurality of wait times associated with enqueued work items in the first queue, an occupancy of the first queue, a number of available members of the first set of resources to service enqueued work items in the first queue, the types of enqueued contacts in the first queue, the priorities of enqueued contacts in the first queue, and anticipated workload levels for the members of the first set of resources"

> Claim 55 requires that the processor monitor several data items:
>
> 1. a plurality of wait times associated with enqueued work items in the first queue,
> 2. an occupancy of the first queue,
> 3. a number of available members of the first set of resources to service enqueued work items in the first queue,
> 4. the types of enqueued contacts in the first queue,
> 5. the priorities of enqueued contacts in the first queue, and
> 6. anticipated workload levels for the members of the first set of resources.

The Examiner cites a portion of Philonenko to show this element of the claim. *See Office Action*, dated September 2, 2009, pp. 6-7. The section of Philonenko cited by the Examiner states:

> Referring now to FIG. 1, a call distribution scheme as illustrated with reference to FIG. 2 may be accomplished by a CTI application executed on processor 23 relative to arriving calls at switch 21. The CTI application monitors switch 21 for incoming calls to a routing or call-distribution point. The status of

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telephones at agent stations is also monitored, so the application has access to real-time information as to which logged-in agents are busy on a call and which are not. The application operates to command switch 21 to distribute calls on a FIFO basis to logged-in available agents.

Philonenko, ¶ [0039].

The Examiner is required to provide a reference that describes all six items listed above. Philonenko only describes "real-time information as to which logged-in agents are busy on a call and which are not." *Id.* Philonenko may describe available members of a set of resources. However, there is absolutely no mention of items 1, 2, 4, 5, and 6 listed above. As such, the Examiner has failed to provide a reference that proves a *prima facie* case of obviousness. For at least this reason, claim 55 is allowable over the cited art.

Missing Limitation: "based on the results of the monitoring step, the processor determining that the first enqueued work item, in the first queue, cannot be serviced by the first set of resources . . . determining that the first enqueued work item, in the first queue, must be put up for bid to meet a predetermined business policy, objective, or goal for a type of contact corresponding to the first enqueued work item"

Claim 55 requires that the processor determine that the enqueued item cannot be serviced by a first set of resources and should be subject of a bidding process. The Examiner cites BT to show this element of the claims. *See Office Action,* dated September 2, 2009, pp. 7-8. The section of BT cited by the Examiner is as follows:

Figure 4 follows the allocation of a work item from its generation through to its completion. The work item is generated by a customer 32 or the environment 33 (step s1) and acquired by the work item handler (step s2). The work item handler passes the item to the OSS agent 31 (step s3). The OSS agent 31 prices the work item using a cost function that reflects its business priorities, for example the urgency of the work with respect to penalty clauses, or the value of the customer according to some model (step s4). For example, the OSS agent 31 will price urgent work low, so that it is easier for the mediator agents 28, 29 to buy it. The OSS agent 31 then offers the work item at the determined price to the mediator agents 28, 29 for each of the workgroups (step s5). The mediator agent 28,29 for each workgroup receives the offer (step s6) and uses a cost function that reflects its local business priorities, and the preferences of its workgroup, to determine a price at which it is prepared to bid for the work (step s7). For example, the mediator agent makes a prediction as to whether it will be able to allocate the work to the workers based on its knowledge of the work item being offered as against the workers' work preferences. The prediction is based on the output from a workgroup classifier algorithm, which will be explained in detail below. At the same time, the mediator agent 28, 29 calculates whether the allocation of the work will meet its local business priorities, for example targets for total work time for its workgroup and therefore whether it should make a bid

at all (step s8). As a result of the calculation, the mediator agent 28, 29 for the workgroup may decide not to bid for the work (step s8), but instead waits for the next offer on the next available work item (step s6). If the mediator agent 28, 29 decides that its local business priorities will be met, it makes a bid for the work item (step s9). The OSS agent 31 receives bids from all workgroups and determines how many bids it has received for the work item (step s10). If only one mediator agent makes a bid (step s11) that bid is accepted by the OSS agent 31 (step s12). If more than one mediator agent makes a bid (step s11), the OSS agent 31 accepts the bid at the highest price (step s13). For example, the OSS agent 31 provides a work item with a relatively high price P, indicating that the work item is categorised as desirable. The mediator agent 28 for the first workgroup 20 determines that it can allocate the work item to its workers, but its workgroup is relatively busy and cannot do the work urgently. It is therefore prepared to offer P for the work item. The mediator agent 29 for the second workgroup 21 also determines that it can allocate the work item to its workers, who are not very busy, so that the work item will assist the workgroup in reaching its targets. The second mediator agent 29 is therefore prepared to offer P+10 for the work item. In this case, the OSS agent 31 accepts the offer of P+10 from the second mediator agent 29 and allocates the work item to it.

BT, ¶ [0014].

While BT and the present application present bidding processes, the bidding process claimed is very different from that described in BT. First, the claim requires that a determination be made as to whether a bidding process should be completed for a work item. BT does not contain such a determination. The Examiner points to the phrase "OSS agent 31 prices the work item using a cost function that reflects its business priorities, for example the urgency of the work with respect to penalty clauses, or the value of the customer according to some model (step s4)." *Id*. However, the OSS agent 31 never makes a determination to start a bidding process. Rather, the OSS agent, in BT, simply prices the work item for a bidding process. As such, BT fails to show this element of the claims. For at least this reason, claim 55 is allowable over the cited art.

Missing Limitation: "based on the results of the monitoring step, the processor determining that the second enqueued work item, in the first queue, can be serviced by the first set of resources to meet a predetermined business policy, objective, or goal for a type of contact corresponding to the second enqueued work item"

Claim 55 requires that the processor determine that a second enqueued item can be serviced by a first set of resources and should not be subject of a bidding process. Without determining that a work item should be subject to a bidding process, the references also cannot

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show a work item should not be subject to a bidding process. Thus, the references also fail to show this determination step. For at least this reason, claim 55 is allowable over the cited art.

Missing Limitation: "the processor determining the times to initiate and complete the bidding process, wherein the time is a function of an estimation of when the predetermined business policy, objective, or goal will be violated in the absence of servicing of the first work item"

Claim 55 requires that the processor determine a time for the bidding process. The Examiner cites BT to show this element of the claims. *See Office Action*, dated September 2, 2009, p. 8. The section of BT cited by the Examiner is as shown above.

The Examiner specifically mentions "OSS agent 31 prices the work item using a cost function that reflects its business priorities, for example the urgency of the work with respect to penalty clauses, or the value of the customer according to some model (step s4)." *BT*, ¶ [0014]. The Examiner goes on to states that the OSS agent, by pricing "urgent work low, so it is easier for the mediator agents 28, 29 to buy it," shows that the OSS agent determines a start and end time for a bidding process. *BT*, ¶ [0014].

Applicants disagree. By manipulating the price, the OSS agent may affect how fast a bid is received. However, there are no limits set for the bidding process. In other words, the OSS agent does not determine that bids will be received from time 0 to time x, as claimed. The OSS agent of BT fails to complete this function. As such, the Examiner has failed to state a *prima facie* case of obviousness. For at least this reason, claim 55 is allowable over the cited art.

Missing Limitation: "first queue . . . first set of resources . . . second queue . . . second set of resources"

Claim 55 requires that there are a first and second queue and a first set of resources and a second set of resources. Further, a first member and a second member of the second set of resources provide bids. The Examiner cites BT to show these elements of the claim. *See Office Action*, dated September 2, 2009, p. 8. The Examiner points to the mediator agent 29 as the second set of resources. Unfortunately, the Examiner's logic does match the claim requirements.

The mediator agent 29 sends one bid. *See BT*, ¶ [0014] ("If the mediator agent 28, 29 decides that its local business priorities will be met, it makes a bid for the work item (step s9)."). To compare this with the claim element, the mediator agent 29 may be equivalent to a member of a resource group because members send bids (a workgroup member cannot be a

member because it fails to send bids). Further, mediator agent 28 can be similar to the second member of the resource group because it also sends a bid. Therefore, mediator agents 28 and 29 would be part of the same resource group. As such, BT only describes a single resource group. In other words, BT does not describe a first set of resources. As such, the Examiner has failed to state a *prima facie* case of obviousness. For at least this reason, claim 55 is allowable over the cited art.

Claims 56-77:

Claims 56-77 each depend, either directly or indirectly, from allowable independent claim 55. If an independent claim is novel under 35 U.S.C. 102, then any claim depending therefrom is also novel. *In re Fine*, 837 F.2d 1071, 1076 (Fed. Cir. 1988). Therefore, claims 56-77 are also allowable over the cited art due, at least in part, to this dependence on an allowable base claim.

Claim 78

Claim 78 includes the same or similar limitations to allowable claim 55. Indeed, the Examiner acknowledges the similarity. *See Office Action*, dated September 2, 2009, p. 9. Thus, for similar reasons as claim 55, claim 78 is also allowable over the cited art.

Claims 79-89:

Claims 79-89 each depend, either directly or indirectly, from allowable independent claim 78. If an independent claim is novel under 35 U.S.C. 102, then any claim depending therefrom is also novel. In re Fine, 837 F.2d 1071, 1076 (Fed. Cir. 1988). Therefore, claims 79-89 are also allowable over the cited art due, at least in part, to this dependence on an allowable base claim.

Claim 90

Claim 90 includes the same or similar limitations to allowable claim 55. Indeed, the Examiner acknowledges the similarity. See Office Action, dated September 2, 2009, p. 9. Thus, for similar reasons as claim 55, claim 90 is also allowable over the cited art.

Claims 91-100:

Claims 91-100 each depend, either directly or indirectly, from allowable independent claim 90. If an independent claim is novel under 35 U.S.C. 102, then any claim depending therefrom is also novel. In re Fine, 837 F.2d 1071, 1076 (Fed. Cir. 1988). Therefore, claims

91-100 are also allowable over the cited art due, at least in part, to this dependence on an allowable base claim.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in a condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested. Applicants do not acquiesce to any objection, rejection, or argument not specifically addressed herein. Rather, the Applicants believe the amendments and arguments contained herein overcome all objections, rejections, or arguments.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at (303) 863-2987.

Respectfully submitted,

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Date: _Dec. 1, 2009_   By: _____

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